Relations among Corporate Governance, Codes of Conduct, and the Profitability of Public Utilities: An Empirical Study of Companies on the Italian Stock Exchange

Gianpaolo Abatecola
University of Rome "Tor Vergata", Italy

Andrea Caputo
University of Rome "Tor Vergata", Italy

Michela Mari
University of Rome "Tor Vergata", Italy

Sara Poggesi
University of Rome "Tor Vergata", Italy

This research examines the relationship between corporate governance and corporate performance through the findings of an empirical longitudinal investigation of public utilities listed on the Italian Stock Exchange (2000 -2008). The data for the measurement of the corporate governance variables are taken from the latest edition of the Italian Preda Code of Best Governance Practices (2006). Standard ratios (Return on Assets, Return on Equity, Return on Sales, Tobin's Q and Book to Market Ratio) were used to assess the performance variables. The results are not conclusive. Specifically, whereas most relationships with the performance variables were statistically significant, different relationships were found between the same corporate governance variables and different indicators of performance. These 'conflicting' findings suggest that further research is needed for the impact of corporate governance practices on the performance of firms to be fully understood.

Introduction

What is the relationship, if any, between corporate governance and performance? Does the enhancement of "good" corporate governance practices effectively improve the profitability of firms?

Corporate governance has become a topic of considerable interest in management studies (Aguilera and Jackson, 2010). Nowadays, scholars are particularly interested in improving the comprehension of the possible relationship between corporate governance and corporate performance, with particular attention to listed firms. Despite the high commitment over the past decade, conclusive results on this relationship are still missing in the literature (e.g. Hambrick, van Werder and Zajac, 2008; Huse, Hoskisson, Zattoni and Viganò, 2009).

With this research, we aim at contributing to fill this gap through the findings of an empirical longitudinal analysis regarding the population of the Italian public utilities listed on the Italian Stock Exchange (ISE) between January, 1st, 2000 and December, 31st, 2008.

Choosing this kind of population can result particularly significant for our goals. In fact, at general level, it is of common knowledge that the performance of public utilities has always been playing a pivotal role as far as the overall competitiveness of most of the nations worldwide is concerned. Furthermore, at country level, over the last twenty years the governance and management of the Italian public utilities have been affected by a number of organizational and legislative changes, such as the liberalization and privatization processes (e.g. Cafferata, 1995, 2010; Bognetti and Robotti, 2007; Grossi, 2007; Grossi and Reichard, 2008a, 2008b; Abatecola and Poggesi, 2010; Argento, Grossi, Tagesson and Collin, 2010).

In this paper, we follow the most recent international standards within the literature as for the operationalization of the (independent) corporate governance and (dependent) performance variables. In particular, we mainly derive the corporate governance variables from the most up-to-dated edition of the Italian *Preda Code of Best Governance Practices* (2006): i) number of non-executive and independent directors within the board; ii) CEO duality; iii) board size; iv) yearly presence of specific internal committees.

As for corporate performance variables, we use standard ratios, such as Return on Assets (ROA), Return on Equity (ROE), Return on Sales (ROS), Tobin's Q and Book to Market Ratio (BMR).

Our results on the investigated relationship are not wholly conclusive and this seems to support those theses which argue that understanding the real impact of corporate governance practices on the performance of firms still needs further improvement.

On the one hand, most of the performance variables result statistically significant at single level. For example, as for Tobin's Q and BMR, R^2 is equal to 0.3544 and 0.3707 respectively. On the other hand, most of these variables present conflicting relationships if associated with the same variable of corporate governance. For example, the presence of the Remuneration Committee is positively associated with Tobin's Q, but negatively associated with BMR.

We structured the research as follows: first, we provide its theoretical framework; second, we highlight the research methods; third, we outline the statistical results; finally, we discuss our main findings and propose some implications of this study for further research and practice.

We primarily intend this paper for those board members, managers and scholars who want to enhance public governance, strategy and decision making by improving the comprehension of the possible relationships between the boards' structure and composition, governance practices and corporate performance.

Theoretical Framework

The relevance of corporate governance has been considerably growing among researchers and practitioners over the last 20 years and this is the result of a number of radical events all over the world, such as privatizations, macro-economic crises and financial frauds.

At the very beginning, scholars have been intensively committed in investigating the link between corporate governance and the theory of the firm (Shleifer and Vishny, 1997), mostly in terms of agency costs (Jensen and Meckling, 1976; Fama and Jensen, 1983), transaction costs (Williamson, 1985) and property rights (Grossman and Hart, 1986; Hart and Moore, 1990; Zingales, 1998). Nowadays, an always increasing interest regards the effective comprehension of the boards of directors' internal behavioral dynamics. Although scholars have produced several enhancements on this topic over the last years, we can still consider boards, for some aspects, as "black boxes" (Daily, Dalton and Cannella, 2003; Gabrielsson and Huse, 2004; Huse, 2007, 2009).

In particular, over this decade researchers have been starting exploratory research to support the hypothesis that corporate performance can improve by adopting the best practices contained within the corporate governance codes issued worldwide after the global financial scandals (Becht, Bolton and Röell, 2002; La Porta, Lopez-de-Silanes, Shleifer and Vishny, 2002; Bhojraj and Sengupta, 2003; Gillan and Starks, 2003; Gompers, Ishii and Metrick, 2003; Kiel and Nicholson, 2003; Wood and Patrick, 2003). The empirical results from this kind of research are not conclusive.

As far as the developing countries are concerned, researches generally find a positive and significant relationship between the corporate governance variables and the corporate market value (e.g. Klapper and Love, 2004; Durnev and Kim, 2005). However, these works do not agree on the impact of the same corporate governance variables on accounting ratios.

As far as the OECD countries are concerned, results seem contradictory too. In the U.S., for example, Gompers et al. (2003) find a positive and significant relationship between specific anti-takeover measures and Tobin's Q, while Larcker, Richardson and Tuna (2007) find only a weak, although positive, relationship between Tobin's Q and more standard corporate governance measures.

Moreover, while Bhagat and Bolton (2008) find a positive relationship between several corporate governance variables and accounting performance measurements, no relationship emerges as far as market based performance measurements are concerned. Brown and Caylor (2006) achieve similar results.

Investigating on a sample of firms extrapolated from the FTSE EuroFirst 300 Index, Bauer, Giinster and Otten (2004) find no relationship between corporate governance variables and performance, both at accounting and market based level. Investigating on a sample of German public firms, Drobetz, Schillhofer and Zimmermann. (2004) obtain opposite results.

In sum, on the one hand scholars find evidence that corporate governance, measured as an overall index, often leads to superior corporate performance (e.g. Alexander, Barnhart and Rosenstein, 2007; Schmid and Zimmermann, 2008; Renders, Gaeremynck and Sercu, 2010). On the other hand, the understanding of the relationship between performance and

specific measures of corporate governance needs more effort. For example, from some studies it emerges that an appropriate presence of independent directors increases firms' profitability (Perry and Shivdasani, 2005; Lin, Ma and Su, 2009), while other studies arrive at opposite conclusions (Choi and Hasan, 2005; Cho and Kim, 2007). Similarly, while some findings support the hypothesis that small boards lead to better performance than bigger boards (Nguyen and Faff, 2006-07), the performance achieved by the latter boards seems to be more stable.

Methods

This section highlights the research methods, in particular: i) how we defined the dataset; ii) how we operationalized the (dependent) performance variables; iii) how we operationalized the (independent) corporate governance variables; iv) how we conducted the statistical analysis.

Dataset

We chose the population of the Italian public utilities listed at the ISE between January, 1st, 2000 and December, 31st, 2008. The selected time period was chosen as the first edition of the *Preda Code* dates back to 1999. Thus, since this year, firms listed at the ISE have been strongly suggested to adhere to the corporate governance standards proposed by the Code, although this adherence is still not compulsory to date.

Efficient public services, at general level, have a positive impact on the competitiveness of nations. Furthermore, at country-system level, over the last twenty years, deep organizational and legislative developments have been affecting also the Italian public utilities. In this regard, scholars, practitioners and institutional policy makers could, at least, remember the privatization process and the European pressures towards market liberalization, as well as the growing consciousness of citizens as customers.

In sum, what we have briefly outlined can contribute to explain why studying the relationship between corporate governance and corporate performance can be of particular interest with specific regard to the investigated population.

As far as our inclusion/exclusion criteria within the population are concerned, we considered all the listed firms comprised within the "utilities", "energy" and "telecommunications" sections of the ISE as "public utilities" in the research. In particular, our criteria for inclusion required for the firms within these sections to be quoted per at least one year during the time period under investigation.

In order to avoid duplications, we decided to eliminate those listed companies that belonged to groups whose listed holding was already present in the dataset. Through these criteria, we defined an overall population of 32 firms.

For collecting the significant data about the population, we used official public sources, such as consolidated financial statements and corporate governance formal reports. Our total observations amounted to 288.

Dependent Variables (Corporate Performance)

Scholars have recently adopted three main approaches to measure corporate performance: accounting based (e.g. Muth and Donaldson, 1998; Erhardt, Werbel and Shrader, 2003), market based (e.g. Barnhart and Rosenstein, 1998; Kiel and Nicholson, 2003) or accounting/market based mixed approaches (e.g. Short, 1994; Thomsen and Pedersen, 2000; Evans, Evans and Loh, 2002). In this paper, we specifically used the third approach. In particular, we chose five performance indicators: two "stock" indicators, namely BMR and Tobin's Q, and three "flow" indicators, namely ROE, ROA and ROS. Table 1 shows our operationalization of these indicators.

Independent Variables (Corporate Governance)

We derived the corporate governance variables from the latest edition of the Italian *Preda Code* (2006), whose main contents have always been based on the principles of agency theory. Table 2 shows these variables.

Table 1. Performance Measurements

Variable	Label	Operationalization
Book to Market Ratio	BMR	Shareholder Equity / Market Capitalization
Tobin's Q	Qtobin	Market Value of Assets / Replacement Cost of Assets
Return on Equity	ROE	Net Income / Shareholder Equity
Return on Assets	ROA	EBIT / Total Assets
Return on Sales	ROS	EBIT / Revenues

Table 2. The *Preda Code*: Main Contents

Code Article	Topic	Main content
2.P.3.	Non executive directors	The number of the non executive directors and the stretch of their powers should guarantee their considerable influence on the overall decision making activities of the board.
2.P.4.	Separation between the Roles of Chief Executive Officer and Chairman within the Board	These roles should be formally separated. The potential operational powers of a Chairman should be detailed in the General Board Review.
3	Independent Directors	The number of the independent directors should be consistent in relation to the total number of the board directors.
6	Director Nominations' Proposal Committee	A Committee should be specifically appointed to nominate directors. This Committee should mainly be made up of non-executive directors.
7.	Remuneration Committee	A Committee should be specifically appointed to evaluate the directors' remuneration. This Committee should mainly be made up of non executive directors.
7.P.2.	Directors' Rewards	A consistent percentage of the Directors' rewards should be related to the firm's performance.
8.	Internal Control Committee	The code recommends the establishment of a Committee, whose structure should be mostly made up of independent directors.

Source: adapted from Abatecola and Poggesi (2010).

Table 3 shows our corporate governance measurements for the analysis, which we mainly derived from the contents of Table 2.

Among these measurements, "Board Size" is the sole corporate governance variable that does not receive any specific indication from the Code. However, we decided to include also this variable within the analysis as this variable has been widely considered by international research on corporate governance over the last years.

It is a matter of fact that developing an acceptable conceptualization of what a "good" corporate governance system is, has always represented – and still does – one of the most relevant challenges within this research area. The corporate governance variables that we specifically selected from the Code are those which scholars have been mostly using within this field over the years.

Control Variable

We identified "Total assets" as the control variable for each firm within the population.

Statistical Analysis

Drawing on past quantitative analyses on the investigated relationship (e.g. Baysinger, Kosnik and Turk, 1991; John and Senbet, 1998; Core, Holthausen and Larcker, 1999; Core, Guay and Rusticus, 2006), we performed a linear regression with the "fixed effects" method (Nickell, 1981; Montgomery, 1991), with the years considered as dummy variables. We developed the following regressions on Stata 10:

We developed separate regression equations on stata 10 for qtobin, roa, bmr, roe and ros.

Table 3. Corporate Governance Measurements

Variable	Label	Operationalization
Non-executive Directors	Necda	Number of Non-executive Directors / Board of Directors' Size
Ceo Duality	Ceod	Overlap between the roles of Chief Executive Officer and Chairman within the Board (1=YES, 0=NO)
Independent Directors	Icda	Number of Independent Directors / Board of Directors' Size
Director Nominations' Proposal Committee	Cpn	Existence of the Nominations' Committee (1=YES, 0=NO)
Remuneration Committee	Cpr	Existence of the Remuneration Committee (1=YES, 0=NO)
Internal Control Committee	Cci	Existence of the Internal Control Committee (1=YES, 0=NO)
Board Size	Cda	Number of Board Members, as yearly results on December, 31st.

For example,

$$qtobin = \alpha + \beta_1 cda_{it} + \beta_2 ceod_{it} + \beta_3 cci_{it} + \beta_4 cpr_{it} + \beta_5 cpn_{it} + \beta_6 necda_{it} + \beta_7 icda_{it} + \beta_8 ta_{it} + \varepsilon_{it}$$

In particular, we associated each performance variable indicator with all the corporate governance indicators and n-1 time-related dummy variables. We used the forward and backward "stepwise" method for choosing what variables had to be included in the model, according to their statistical significance.

Research Findings

Table 4 shows the descriptive statistics for all the investigated variables.

As for corporate performance, we can note that Tobin's Q presents a mean value slightly higher than 1. We have also to emphasize that the maximum and range value of this variable are equal to 6.5057 and 6.1526 respectively. Both these values mainly derive from the over-capitalization registered by the Acotel Group in 2000. Similarly, ROE's minimum value mainly derives from the performance of Tiscali in 2008. Moreover, ROE's negative mean value has been mostly influenced by the overall population performance recorded in the last three years.

Table 4. The Investigated Population: Descriptive Statistics (2000-2008)

Variable	Mean	Max	Min	Sd	Variance	Cv	Range	Se(mean)
CORPORATE PERFORMANCE								
Qtobin	1.227492	6.505775	0.3531061	0.6820688	0.4652179	0.5556605	6.152669	0.0481094
ROE	-0.323974	1.491957	-56.749	3.944422	15.55847	-12.17512	58.24096	0.2659329
ROA	0.0248731	0.3019546	-0.4888628	0.087258	0.007614	3.508134	0.7908174	0.0058829
BMR	0.7661299	3.418782	-0.0747901	0.4834864	0.2337591	0.6310763	3.493572	0.0341877
ROS	-0.1272667	4.194762	-13.72131	1.356199	1.839277	-10.65635	17.91607	0.0914349
CORPORATE GOVERNANCE								
Ceod	0.3037383	1	0	0.4609493	0.2124742	1.517587	1	0.0315098
Cci	0.9138756	1	0	0.2812212	0.0790854	0.3077238	1	0.0194525
Cpr	0.8	1	0	0.4009558	0.1607656	0.5011947	1	0.0276686
Cpn	0.1285714	1	0	0.3355248	0.1125769	2.609637	1	0.0231534
Cda	9.102326	21	3	3.188581	10.16705	0.350304	18	0.2174594
Necda	0.7635941	1	0.2857143	0.1382035	0.0191002	0.1809908	0.7142857	0.0098717
Icda	0.508022	0.9166667	0.1	0.2517671	0.0633867	0.495583	0.8166667	0.0179834
CONTROL								
Ta	11229.38	133207	11.93	25446.88	648000000	2.266099	133195.1	1715.628

As for corporate governance, we can notice that while the Internal Control Committee (Cci) is present in quite all the firms within the population (its mean value is equal to 0.9138), the Nominations' Committee (Cpn) is almost absent (its mean value is equal to 0.1285). Finally, board size (Cda) is equal to about 9 members.

Table 5 shows the correlations between dependent, independent and control variables. We use the star (*) to indicate those correlations which are significant at the level of 20%.

As we show in the table, Cda (board size) and Necda (number of non executive directors) express the most significant correlations to corporate performance.

Table 6 illustrates the results of the regressions. R^2 ranges from the maximum value of 0.3707 and the minimum value of 0.0188, because of its relationship with ROE and MBR respectively.

Some results from this table warrant additional discussion.

The model results very explanatory ($R^2 = 0.3544$) for the relationship between Tobin's Q and corporate governance variables. In particular, Tobin's Q results positively associated with the Remuneration Committee, but negatively associated with non executive directors and board size. All the correlations generally present a good level of significance.

The model results very explanatory ($R^2 = 0.3707$) also for the relationship between BMR and corporate governance variables. In particular, BMR results negatively associated with the Remuneration Committee, but positively associated with the Internal Control Committee and with board size.

As for ROA, the model is quite explanatory ($R^2 = 0.2687$). This variable is positively associated with independent directors (Icda) and with the Remuneration Committee, but negatively associated with the Nominations' Committee.

Table 5. Correlations

	Qtobin	ROE	ROA	BMR	ROS	Ceod	Cci	Cpr	Cpn	Cda	Necda	Icda	Ta
Qtobin	1												
ROE	0.0069	1											
ROA	-0.0624	0.1508*	1										
BMR	-0.5295*	0.1176*	-0.0971*	1									
ROS	-0.0876	0.0077	0.2552*	0.0477	1								
Ceod	0.1227*	-0.0995*	-0.0366	-0.0642	0.0693	1							
Cci	-0.0417	-0.0174	0.1015*	0.061	-0.0214	-0.0138	1						
Cpr	0.0391	-0.0301	0.3255*	-0.1400*	0.0168	-0.0758	0.5785*	1					
Cpn	0.0198	-0.0279	-0.1268*	0.0135	-0.0003	-0.0027	0.1182*	0.1921*	1				
Cda	-0.2129*	0.1231*	0.2394*	0.1732*	0.0316	-0.3187*	0.1799*	0.3429*	-0.1548*	1			
Necda	-0.1909*	-0.0006	0.1069*	0.0962*	0.0999*	0.1629*	0.0864	-0.0338	-0.2495*	-0.2634*	1		
Icda	-0.0297	0.0976*	0.2147*	-0.0282	0.1458*	0.0831	0.1644*	0.0266	0.0608	-0.2983*	0.3892*	1	
Ta	-0.0354	0.0476	0.3309*	-0.0813	0.0930*	-0.2295*	0.1245*	0.2064*	-0.0947*	0.1317*	0.1998*	0.1909*	1

As for ROS, the model is still quite explanatory ($R^2 = 0.2129$). While this variable is positively associated with independent directors, ambiguity emerges as far as the direction of its association with CEO duality and the Internal Control Committee is checked, in that the intervals of confidence show a discordant sign.

Finally, as for ROE, the model is not sufficiently explanatory ($R^2 = 0.0188$).

Discussion and Conclusions

Figure 1 presents a synthesis of the observed results.

Three main evidences require specific discussion. First, the relationship between ROE and any of the corporate governance variables is not sufficiently explanatory and this seems to support those studies which raise some doubts on considering ROE as the variable most appropriate to this type of investigations (e.g. Barber and Lyon, 1996, Core et al., 2006; Bawhede, 2010).

Second, also CEO duality is not associated with any performance variable and this seems to support the current claim that more research is needed on the question whether duality positively affects performance or not (e.g. Daily and Dalton, 1992; Brickley, Coles and Jarrell, 1997; Vafeas and Theodorou, 1998; Sonnenfeld, 2004).

Third, it mainly emerges that many corporate governance variables generally present a significant statistical relationship with corporate performance, but this relationship results conflicting when a specific corporate governance variable is associated with different performance variables.

For example, the evidence that regards both the non-executive and independent directors is ambiguous. We know that the question whether these kinds of directors (who can be

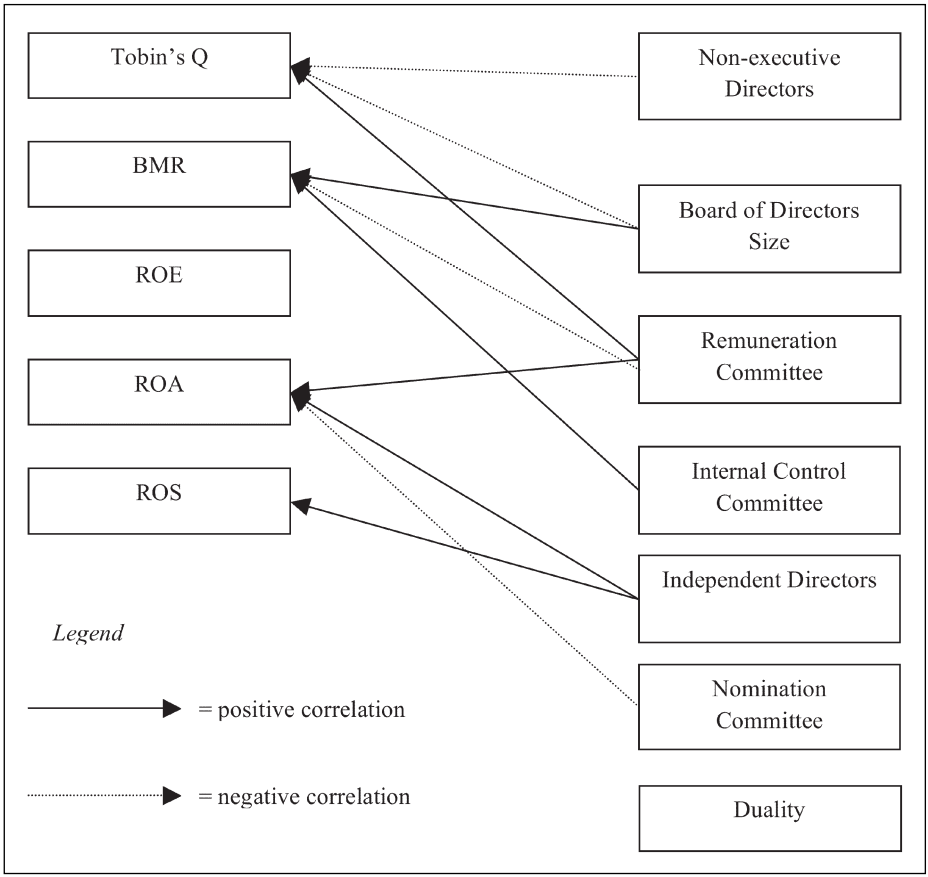
Table 6. Regressions

	qtobin		bmr		roe		ros		roa	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
Cda	-0.0423288	0	0.0430917	0	0.1592163	0.181			0.0016405	0.258
Ceod							0.3340736	0.079		
Cci			0.3116616	0.013			-0.3815004	0.11		
Cpr	0.3317224	0	-0.5086271	0					0.0603738	0.011
Cpn									-0.0441975	0.009
Necda	-0.6552323	0.034								
Icda							0.7882617	0.023	0.0726713	0.005
Ta			-2.17E-06	0.002	3.59E-06	0.118	5.60E-06	0.022	7.42E-07	0
_cons	3.080956	0	0.3249709	0.003	-1.96447	0.18	-0.5604253	0.048	-0.0794794	0.015
R-squared	0.3544		0.3707		0.0188		0.0632		0.2687	
Obs.	184		184		186		187		188	

generalized as "outside directors") positively affect corporate performance or not is still not completely addressed to date. In fact, while some studies find that outside directors help to boost performance (e.g. Perry and Shivdasani, 2005; El Mehdi, 2007, Lin et al., 2009), other studies arrive at opposite conclusions (Choi and Hasan, 2005; Cho and Kim, 2007). Not conclusive interpretations emerge also from this analysis. In fact, non-executive directors result negatively associated with Tobin's Q, but do not present significant associations with accounting ratios and this evidence seems somehow contradictory. However, at first glance, we could explain the non-executives' negative impact on Tobin's Q as the tendency of market investors to appreciate less those companies whose board is composed of directors who are not very strategically active.

Moreover, the scenario becomes even more complex as far as interpreting the results pertaining to the presence of independent directors is concerned. First, this presence is

Figure 1. Summary of the Results



not associated with market performance indicators, while it is positively associated with accounting ratios, such as ROA and ROS. Second, we have to carefully consider that independent and non-executive directors are kinds of directors whose substantial role within boards is not so different. For example, none of them is the first responsible for the board's strategic planning. Thus, we could have expected that the relationships of these two corporate governance variables with corporate performance would have shown a substantially converging trend. This does not emerge from the analysis.

The evidence about the relationship between board size and corporate performance is contrasting too. In fact, board size is negatively associated with Tobin's Q and this supports past evidence (Jensen, 1993; Yermack, 1996; Hermalin and Weisbach, 2003; Nguyen and Faff, 2006-07; *contra* Cheng, 2008), but positively associated with BMR. Also in this case, the scenario becomes even more ambiguous if we consider that board size is not associated with any accounting ratio.

We derive similar contradictory interpretations from observing the relationship between the presence of specific committees and corporate performance. For example, in the previous section we showed that the Remuneration Committee is positively associated with Tobin's Q and ROA, but negatively associated with BMR. If we consider that this committee has a monitoring function, its positive associations seem to support the expectations provided by agency theory over the years. But this is also the reason for why its negative association with BMR results unexpected to us. Furthermore, BMR is also positively associated with the Internal Control Committee. Given that also this Committee has a monitoring role, we could have expected this kind of relationship.

Finally, the relationship between the Nominations' Committee and corporate performance appears of modest interest as this committee is the least present within the observed population, although it is negatively associated with ROA.

From this study, some interesting implications for further research on this topic also emerge. Some of them are related to the methods of this analysis.

First, neither the size of the population of the dataset nor the time period of the observations seem to constitute a limitation to this study, as we can detect similar consistence as far as recent research on corporate governance is concerned (e.g. Black, 2001; El Mehdi, 2007; Garay and Gonzales, 2008; Omran, 2009).

Second, in this study we adopted a panel analysis to investigate on the overall relationship between corporate governance and performance. However, how these variables have been individually evolving over time remains to be investigated. In particular, the question of whether the overall corporate governance system of the investigated population has improved or not over time still remains open. Although answering to this question was not a specific goal of this research, it can be very interesting both at general and at specific level. In particular, as far as interpreting these results is concerned, this kind of answer can help to provide the analysis with a better overall understanding.

Third, it should be taken into account that investigating on the relationship between corporate governance and performance can produce incomplete interpretations if

corporate strategy is not properly considered. This seems particularly crucial as for the dataset of this analysis. In fact, we have stated that radical strategic and organizational changes have been affecting the Italian public utilities over the last 20 years. In particular, the pressure towards liberalization and privatization in the utility sector has been leading public utilities to develop, according to the cases, reactive or pro-active strategies which we did not specifically explore in this paper.

Fourth, we believe that a physiological limitation can be found in those analyses, such as this, that, although widely diffused in the literature to date, are built primarily on secondary data. Who are the people sitting within the board? Who are the people in charge of the various control committees? Are the formal independent directors "really" independent? How do the internal governance processes work and what impact can they have on performance? Qualitative primary data on these topics can be very suitable for complementary expanding the overall significance of research efforts within this area.

References

Abatecola, G. and Poggesi, S. (2010), "Corporate governance and performance. Evidence from the Italian listed local public utilities (2000-2008)", *International Journal of Public Administration,* Vol. 33 No. 11, pp. 534-540.

Aguilera, R.V. and Jackson, G. (2010), "Comparative and international corporate governance", *Academy of Management Annals,* Vol. 4 No. 1, pp. 485-556.

Alexander, J.C., Barnhart, S.W. and Rosenstein, S. (2007), "Do investor perceptions of corporate governance initiatives affect firm value? The case of TIAA-CREF", *Quarterly Review of Economics & Finance,* Vol. 47 No. 2, pp. 198-214.

Argento, D., Grossi, G., Tagesson, T. and Collin, S.O. (2010), "The 'externalisation' of local public service delivery: experience in Italy and Sweden", *International Journal of Public Policy*, Vol. 5 No. 1, pp. 41-56.

Barber, B.M. and Lyon, J.D. (1996), "Detecting abnormal operating performance: the empirical power and specification of test statistics", *Journal of Financial Economics*, Vol. 41 No. 3, pp. 359-399.

Barnhart, S.W. and Rosenstein, S. (1998), "Board composition, managerial ownership, and firm performance: an empirical analysis", *Financial Review*, Vol. 33 No. 4, pp. 1-16.

Bauer, R., Giinster, N. and Otten, R. (2004), "Empirical evidence on corporate governance in Europe: the effect on stock returns, firm value and performance", *Journal of Asset Management,* Vol. 5 No. 2, pp. 91-104.

Bawhede, H.V. (2010), "On the relationship between corporate governance compliance and operating performance", *Accounting and Business Research*, Vol. 39 No. 5, pp. 497-513.

Baysinger, B.D., Kosnik, R.D. and Turk, T.A. (1991), "Effects of board and ownership structure on corporate R&D strategy", *Academy of Management Journal, Vol. 34 No. 1, pp. 205-214.*

Becht, M., Bolton, P. and Röell, A. (2002), *Corporate Governance and Control*, National Bureau of Economic Research, Cambridge.

Bhagat, S. and Bolton, B. (2008), "Corporate governance and firm performance", *Journal of Corporate Finance*, Vol. 14 No. 3, pp. 257-273.

Bhojraj, S. and Sengupta, P. (2003), "Effect of corporate governance on bond ratings and yields: the role of institutional investors and outside directors", *Journal of Business,* Vol. 76, No. 3, pp. 455-476.

Black, B. (2001), "The corporate governance behavior and market value of Russian firms", *Emerging Markets Review*, Vol. 2 No. 2, pp. 89-108.

Bognetti, G. and Robotti, L. (2007), "The provision of local public services through mixed enterprises: the Italian case", *Annals of Public and Cooperative Economics*, Vol. 78 No. 3, pp. 415-437.

Brickley, J.A., Coles, J.L. and Jarrell, G. (1997), "Leadership structure: separating the CEO and Chairman of the board", *Journal of Corporate Finance*, Vol. 3 No. 3, pp. 189-220.

Brown, L.D. and Caylor, M.L. (2006), "Corporate governance and firm valuation", *Journal of Accounting and Public Policy*, Vol. 25 No. 4, pp. 409-434.

Cafferata, R. (1995), "Italian state-owned holdings, privatization and the single market", *Annals of Public and Cooperative Economics*, Vol. 66 No. 4, pp. 401-429.

Cafferata, R. (2010), "The enduring presence of groups and public enterprises in the Italian economy", *Journal of Management and Governance,* Vol. 14 No. 3, pp. 199-220.

Cheng, S. (2008), "Board size and the variability of corporate performance", *Journal of Financial Economics,* Vol. 87 No. 1, pp. 157-176.

Cho, D.S. and Kim, J. (2007), "Outside directors, ownership structure and firm profitability in Korea", *Corporate Governance: An International Review,* Vol. 15 No. 2, pp. 239-250.

Choi, S. and Hasan, I. (2005), "Ownership, governance, and bank performance: Korean experience", *Financial Markets, Institutions and Instruments,* Vol. 14 No. 4, pp. 215-242.

Core, J.E., Holthausen, R.W. and Larcker, D.F. (1999), "Corporate governance, chief executive officer compensation, and performance", *Journal of Financial Economics*, Vol. 51, pp. 371-406.

Core, J., Guay, W. and Rusticus, T. (2006), "Does weak governance cause weak stock returns? An examination of firm operating performance and analysts' expectations", *Journal of Finance*, Vol. 61 No. 2, pp. 655-687.

Daily, C.M. and Dalton, D.R. (1992), "The relationship between governance structure and corporate performance in entrepreneurial firms", *Journal of Business Venturing*, Vol. 7 No.5, pp. 375-386.

Daily, C.M., Dalton, D. and Cannella, A. (2003), "Corporate governance: decades of dialogue and data", *Academy of Management Review,* Vol. 28 No. 3, pp. 371-382.

Drobetz, W., Schillhofer, A. and Zimmermann, H. (2004), "Corporate governance and expected stock returns: evidence from Germany", *European Financial Management*, Vol. 10 No. 2, pp. 267-293.

Durnev, A. and Kim, E.H. (2005), "To steal or not to steal: firm attributes, legal environment, and valuation", *Journal of Finance*, Vol. 60 No. 3, pp. 1461-1493.

El Mehdi, I.K. (2007), "Empirical evidence on corporate governance and corporate performance in Tunisia", *Corporate Governance: An International Review*, Vol. 15 No. 6, pp. 1429-1441.

Erhardt, N.L., Werbel, J.D. and Shrader, C.B. (2003), "Board of director diversity and firm financial performance", *Corporate Governance: An International Review*, Vol. 11 No. 2, pp. 102-111.

Evans, J., Evans, R. and Loh, S. (2002), "Corporate governance and declining firm performance", *International Journal of Business Studies*, Vol. 10 No. 1, pp. 1-18.

Fama, E.F. and Jensen, M.C. (1983), "Agency problems and residual claims", *Journal of Law and Economics,* Vol. 26 No. 2, pp. 327-349.

Gabrielsson, J. and Huse, M. (2004), "Context, behavior and evolution - challenges in research on boards and governance", *International Studies in Management and Organization,* Vol. 34 No. 2, pp. 11-36.

Garay, U. and Gonzales, M. (2008), "Corporate governance and firm value: the case of Venezuela", *Corporate Governance: An International Review*, Vol. 16 No. 3, pp. 194-209.

Gillan, S. and Starks, L.T. (2003), "Corporate governance, corporate ownership, and the role of institutional investors: a global perspective". *Journal of Applied Finance*, Vol. 13 No. 2, pp. 4-22.

Gompers, P., Ishii, J. and Metrick, A. (2003), "Corporate governance and equity prices", *Quarterly Journal of Economics,* Vol. 118, pp. 107–155.

Grossi, G. (2007), "Governance of public–private corporations in the provision of local utilities in the Italian case", *International Public Management Review*, Vol. 8 No. 1, pp. 130-151.

Grossi, G. and Reichard, C. (2008a). "Municipal corporatization in Germany and Italy", *Public Administration Review*, Vol. 10 No. 5, pp. 597-617.

Grossi, G. and Reichard, D. (2008b), "The corporate governance of municipal groups in Germany and Italy", *Public Management Review,* Vol. 10 No. 5, pp. 597-617.

Grossman, S. and Hart, O. (1986), "The costs and benefits of ownership: a theory of vertical and lateral integration", *Journal of Political Economy,* Vol. 94, pp. 691-719.

Hambrick, D.C., van Werder, A.V. and Zajac, E.J. (2008), "New directions in corporate governance research", *Organization Science,* Vol. 19 No. 3, pp. 381-385.

Hart, O. and Moore, J. (1990), "Property rights and the nature of the firm", *Journal of Political Economy,* Vol. 98 No. 6, pp. 1119-1158.

Hermalin, B.E. and Weisbach, M.S. (2003), "Boards of directors as an endogenously determined institution: a survey of the economic literature", *Economic Policy Review*, Vol. 9 No. 1, pp. 7-26.

Huse, M. (2007), *Boards, Governance and Value Creation: The Human Side of Corporate Governance*, Cambridge University Press, Cambridge.

Huse, M. (2009), "Exploring methods and concepts in studies of board processes", in Huse, M. (Ed.). *The value creating board: corporate governance and organizational behavior*, Routledge, Abingdon, pp. 221-233.

Huse, M., Hoskisson, R., Zattoni, A. and Viganò, R. (2009), "New perspectives on board research: changing the research agenda", *Journal of Management and Governance,* Vol 7, pp. 337-360.

Jensen, M.C. (1993), "The modern industrial revolution. Exit, and the failure of internal control systems", *Journal of Finance,* Vol. 48 No. 3, pp. 831-80.

Jensen, M.C. and Meckling, W. (1976), "Theory of the firm: managerial behaviour, agency costs, and ownership structure", *Journal of Financial Economics,* Vol. 3 No. 4, pp. 305-360.

John, K. and Senbet, L.W. (1998), "Corporate governance and board effectiveness", *Journal of Banking & Finance*, Vol. 22 No. 4, pp. 371-403.

Kiel, G.C. and Nicholson, G.J. (2003), "Board composition and corporate performance: how the Australian experience informs contrasting theories of corporate governance", *Corporate Governance: An International Review*, Vol. 11 No. 3, pp. 189-205.

Klapper, L.F. and Love, I. (2004), "Corporate governance, investor protection, and performance in emerging markets", *Journal of Corporate Finance*, Vol. 10 No. 5, pp. 703-728.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (2002), "Law and finance", *Journal of Political Economy,* Vol. 106 No. 6, pp. 1113–1155.

Larcker, D.F., Richardson, S.A. and Tuna, I. (2007), "Corporate governance, accounting outcomes, and organizational performance", *Accounting Review*, Vol. 82 No. 4, pp. 963-1008.

Lin, C., Ma, Y. and Su, D. (2009), "Corporate governance and firm efficiency: evidence from China's publicly listed firms", *Managerial and Decision Economics,* Vol. 30 No. 2, pp. 193-209.

Montgomery, D.C. (1991), *Design and Analysis of Experiments* (5th Ed.), John Wiley & Sons, New York.

Muth, M. and Donaldson, L. (1998), "Stewardship theory and board structure: a contingency approach". *Corporate Governance: An International Review,* Vol. 6 No. 1, pp. 5-28.

Nguyen, H. and Faff, R. (2006-07), "Impact of board size and board diversity on firm value, Australian experience", *Corporate Ownership and Control,* Vol. 4 No. 2, pp. 24-32.

Nickell, S. (1981), "Biases in dynamic models with fixed effects", *Econometrica,* Vol. 49 No. 6, pp. 1417-1426.

Omran, M. (2009), "Post privatization corporate governance and firm performance: the role of private ownership concentration, identity and board composition", *Journal of Comparative Economics*, Vol. 37 No. 4, pp. 658-673.

Perry, T. and Shivdasani, A. (2005), "Do boards affect performance? Evidence from corporate restructuring", *Journal of Business,* Vol. 78 No. 4, pp. 1403-1431.

Renders, A., Gaeremynck, A. and Sercu, P. (2010), "Corporate governance ratings and company performance: a cross-European study", *Corporate Governance: An International Review*, Vol. 18 No. 2, pp. 87-106.

Schmid, M.M. and Zimmermann, H. (2008), "Leadership structure and corporate governance in Switzerland", *Journal of Applied Corporate Finance,* Vol. 20 No. 1, pp. 109-120.

Shleifer, A. and Vishny, R.W. (1997), "A survey of corporate governance", *Journal of Finance,* Vol. 52 No. 2, pp. 737-783.

Short, H. (1994), "Ownership, control, financial structure and the performance of firms", *Journal of Economic Surveys*, Vol. 8 No. 3, pp. 203-249.

Sonnenfeld, J. (2004), "Good governance and the misleading myths of bad metrics", *Academy of Management Executive,* Vol. 18 No. 1, pp. 108-113.

Thomsen, S. and Pedersen, T. (2000), "Ownership structure and economic performance in the largest European companies", *Strategic Management Journal,* Vol. 21 No. 6, pp. 689-705.

Vafeas, N. and Theodorou, E. (1998), "The relationship between board structure and firm performance in the UK", *British Accounting Review,* Vol. 30 No. 4, pp. 383-407.

Williamson, O. (1985), *The Economic Institutions of Capitalism*, The Free Press, New York.

Wood, M. and Patrick, T. (2003), "Jumping on the bandwagon: outside representation in corporate governance", *Journal of Business and Economic Studies,* Vol. 9 No. 2, pp. 48-53.

Yermack, D. (1996), "Higher market valuation of companies with a small board of directors", *Journal of Financial Economics,* Vol. 40 No. 2, pp. 185-211.

Zingales, L. (1998), "Corporate governance", in Newman, P. (Ed.), *The New Palgrave Dictionary of Economics and the Law*, Stockton Press, London, pp. 453-497.

Contact email address: gianpaolo.abatecola@uniroma2.it